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**A COMPARITIVE ASSESSMENT OF ALTERNATIVE  
MODELS OF FACTORS PERCEIVED TO CONTRIBUTE  
TO SUCCESS IN INTERNATIONAL ASSIGNMENTS**



**Winfred Arthur, Jr.**

**Department of Psychology  
Texas A&M University  
College Station, Texas 77843-4235**

**Winston Bennett, Jr.**

**HUMAN RESOURCES DIRECTORATE  
TECHNICAL TRAINING RESEARCH DIVISION  
7909 Lindbergh Drive  
Brooks AFB, TX 78235-5352**

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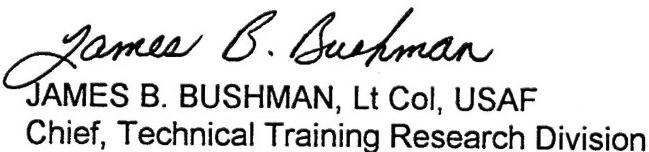
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WINSTON BENNETT, JR  
Project Scientist  
Instructional Systems Research Branch



R. BRUCE GOULD, Technical Director  
Technical Training Research Division



JAMES B. BUSHMAN, Lt Col, USAF  
Chief, Technical Training Research Division

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## PREFACE

Using Campbell's (1990) theory of job performance, the present study sought to identify the factors underlying the job performance of international assignees and their relative importance. Four alternative models of international assignee job performance were also evaluated.

Subjects were 338 international assignees from diverse countries (nationality) and organizations, assigned to diverse countries, and performing diverse jobs. Although eight factors were identified as hypothesized, the content and labels of these factors differed from those postulated by the theory. The eight job performance factors in descending order of importance were Flexibility, Family Situation, Management/Administration, Integrity, Effort, Tolerance, Cross-Cultural Interest, and Openness. Factor importance ratings were also influenced by position (managerial/non-managerial status), organizational type, international assignees' nationality, the country to which they were assigned, and cultural distance (similarity between nationality and assigned country). Finally, although military personnel were excluded from this study since they typically are assigned to places where their culture is present in some form (e.g., they are assigned to an U.S. military base), the factors identified as being important for international assignees, in general, should also be considered as part of the assignment process and in job design and redesign for military personnel in foreign postings. The importance of these factors should also be considered when developing the cultural training and education programs for military personnel prior to their assignment within non-US host countries. The likelihood that these factors may serve as predictors of the success of a military member in a foreign assignment, in a manner similar to that of non-military personnel, must be considered and addressed. Understanding the potential impact of these factors on job performance, the quality of military work life, job satisfaction, and the ultimate success of a military member in a foreign assignment, is critical to ensuring an appropriate match between individuals and the jobs and tasks they must perform as part of their military duty. Implications of these findings are discussed along with suggestions and recommendations for future research and practice.

A version of this paper that focuses on different aspects of the data presented here, has been published in *Personnel Psychology*, Volume 48, pages 99-114. The research described was conducted during the second author's Air Force-sponsored doctoral studies at Texas A&M University.

A Comparative Assessment of Alternate Models  
of Factors Perceived to Contribute to Success in International Assignments

**SUMMARY**

The present study sought to identify and describe the structure of performance for international assignees. This was accomplished by using factor analytic procedures to empirically reduce into factors, ratings collected from international assignees on the importance of commonly listed attributes of their job performance. Implications of these findings are discussed along with suggestions and recommendations for future research and practice.

**I. INTRODUCTION**

International assignments have always played a major role in the operations and activities of multinational companies (MNCs). Although failure has been variously operationalized, the research literature on U.S. international assignees is fairly consistent in reporting relatively high failure rates among these individuals (Black, 1988; Copeland & Griggs, 1985; Dunbar & Ehrlich, 1986; Tung, 1988). In addition, the costs associated with these failures are fairly high (Black, 1988; Gomez-Mejia & Welbourne, 1991; Oddou, 1991; Stone, 1991; Wederspahn, 1992).

One potential solution to the high failure rate for international assignees centers on the use of effective selection and training interventions. Unfortunately, the use of cross-cultural training, particularly in American businesses, is not very widespread (Black, 1988; Black & Mendenhall, 1990; Oddou, 1991). One reason given for the general paucity of cross-cultural training is the reported perception of top management that training is not effective (Oddou, 1991) despite research that has demonstrated the effectiveness of cross-cultural training (e.g., Black & Mendenhall, 1990; Deshpande & Viswesvaran, 1992; Rippert-Davila, 1985; Tung, 1982).

The perception that training is ineffective may be traced to the absence of a clear and explicit knowledge structure of what needs to be trained. It has been argued that many personnel administrators believe that the factors associated with international assignee success are simply not known well enough to devise sound selection instruments and training programs

(Baker & Ivancevich, 1971; Mendenhall & Oddou, 1985). In other words, if the selection and training of international assignees is to become more widely accepted by the multinational business community, we need to know, in clear terms, exactly what to use in selection and training. Thus, a clearer understanding of the key factors that underlie international assignee job performance would aid personnel directors in the design of (1) selection instruments that are predictive of international assignee success, and (2) training programs that would address the relevant factors of success and train international assignees in the necessary skills relevant to those factors.

#### A Model of International Assignee Job Performance

The lack of a very clear understanding of exactly what factors are important to international assignee job performance is consistent with Campbell's (1990) assertion that there is a paucity of literature on the structure and content of performance in human resource management and organizational behavior. In the international assignee domain, the absence of a theory of performance is highlighted by the various findings of researchers (e.g., Alder, 1983; Black & Gregersen, 1991; Black, Mendenhall, & Oddou, 1991; Black & Stephens, 1989; Gregersen & Black, 1990; Hays, 1971; Hough & Dunnette, 1992; Tung, 1981) who have attempted to identify performance factors underlying international assignee success. And although the number of studies highlights the importance of this issue, there are many reasons that could explain the inability to definitively establish the performance components for international assignees. First, with few exceptions, most of these previous attempts have typically been subjective and rationally-based. Second, these studies have also been limited to only U.S. international assignees. Third, and perhaps most importantly, these studies have been conducted without a theory or model of international assignee performance. As noted by Campbell (1990) "the biggest stumbling block to a lasting accumulation of knowledge about predicting performance is the lack of a conceptual structure for job performance" (p. 726). To remedy the theoretical inattention paid to performance in the organizational literature, Campbell (1990) presents a theory of performance which outlines the major latent components of performance and calls for "a great deal more research on the nature of performance and its appropriate measurement" (p. 726). Consequently, the objective of the present study was to

use Campbell's model of performance in an attempt to identify the underlying factors of international assignee job performance.

Campbell's (1990) theory of performance draws a distinction between performance components (factors/constructs), performance determinants, and the predictors of these determinants. A taxonomy of major performance components consisting of eight factors is proposed by this theory. These major components or factors are (1) job-specific proficiency; (2) non-job-specific proficiency; (3) written and oral communication; (4) demonstrating effort; (5) maintaining personal discipline; (6) facilitating peer and team performance; (7) supervision; and (8) management/administration. Furthermore, the theory contends that individual differences on a specific performance factor are a function of three major determinants, declarative knowledge, procedural knowledge and skill, and motivation. Campbell's (1990) theory of a latent structure of job performance also recognizes that the eight factors do not have the same form for all jobs and further, that a particular job might not incorporate all eight factors. Various jobs may have different factor patterns, along with variations in factor content. In summary, the tenets of the theory would suggest that the specific job performance components and their relative importance would vary from one job to another. Therefore, in accordance with Campbell's (1990) call for more research on this model of performance, the present study sought to identify and describe the structure of performance for international assignees. This was accomplished by using factor analytic procedures.

A review of the international assignee literature demonstrated that different numbers of international assignee job performance factors or dimensions had been identified or suggested by different researchers. For instance, Alder (1983) and Hays (1971) identified four general factors of international assignee performance. Ronen (1989) suggests five, Tung (1981) seven, and Hough and Dunnette (1992) identify eleven dimensions of "foreign assignment effectiveness and adjustment". It is important to note that these "models" have been primarily atheoretical in nature. A list of the factors characterizing each of these models is presented in Table 1.

**Table 1**  
**Specific Factors Characterizing Various International Assignee Job Performance Models**

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**Four-Factor Models**

**ALDER (1983)**

Spouse and family qualities  
 Cross-cultural and international skills  
 Personal and social skills  
 Professional and managerial skills

**HAYS (1971)**

Local language ability  
 Family situation  
 Relational abilities  
 Job ability

**Five-Factor Model**

**RONEN (1989)**

Job factors  
 Relational dimensions  
 Motivational state  
 Family situation  
 Language skills

**Seven-Factor Model**

**TUNG (1981)**

Spouse adjustment  
 International assignment adjustment  
 Other family-related factors  
 Personality and emotional factors  
 Overseas responsibilities  
 Technical competence  
 Motivation

**Eight-Factor Model**

**CAMPBELL (1990)**

Job-specific proficiency  
 Non-job-specific proficiency  
 Written and oral communication  
 Effort  
 Personal discipline  
 Facilitating peer and team performance  
 Supervision  
 Management/Administration

**Eleven-Factor Model**

**HOUGH & DUNNETTE (1992)**

Communicating/persuading  
 Initiative/effort  
 Technical competence  
 Working with others  
 Establishing/maintaining business contacts  
 Company support  
 Spouse and family support  
 Accepting foreign assignments  
 Adjustment to foreign business practice  
 Adjustment to living abroad  
 Knowledge of foreign language

---

Using confirmatory factor analysis procedures, these different "models" of international assignee job performance were tested against the eight-factor model postulated by Campbell's theory. Consequently, Campbell's (1990) taxonomy of job performance was the basis for hypothesizing that:

Hypothesis 1: There are eight underlying factors of international assignee job performance.

An eight-factor model will provide a better fit to international assignee job performance data than either a four-, five-, seven-, or eleven-factor model.

In addition to knowing the underlying factors or dimensions of international assignee job performance, it is also important to delineate the relative importance of these factors. For instance, with relative importance data, organizations can make informed choices, in the context of limited resources, about what to emphasize and concentrate on in the design of selection and training systems. Therefore, the second study objective was to assess the relative importance of the job performance components of international assignees. On the basis of past research (e.g., Hays, 1971; Heller, 1980; Mendenhall, Dunbar, & Oddou, 1987; Tung, 1981, 1987) it was hypothesized that:

Hypothesis 2: Psycho-social factors such as relational, interpersonal, and family situation will be perceived to be relatively more important than technical and job-specific knowledge factors.

#### Generalizability of International Assignee Job Performance Factors

Although the primary objectives of the current study were to identify factors that are perceived to underlie international assignee job performance along with their relative importance, it seemed plausible that the relative importance of specified factors would depend on a number of secondary variables including managerial/non-managerial status, organizational type, and cultural distance. Therefore, a secondary objective of the study was to assess the generalizability of the job performance factors across these variables.

First, most international assignee research has been criticized for using primarily middle- and upper-level executives and managers as respondents and subjects (Black & Mendenhall, 1990;

Hough & Dunnette, 1992; Stroh, Brett, & Reilly, 1992). Obtained results may not, therefore, be generalizable to technical and non-managerial international assignees. The moderating effects of this and other job characteristics have been demonstrated in the cross-cultural training literature (Black & Mendenhall, 1990; Mendenhall et al., 1987; Tung, 1982). The implications of these findings and the associated conceptual framework can be extended to the international assignee job performance research arena. If one accepts the proposition that (a) the nature of most managerial jobs call for a larger amount of interaction with host nationals and a deeper integration into the host culture (Black & Mendenhall, 1990); and (b) and that non-managerial international assignees tend to have international assignments of shorter duration and less job-required social interaction with host nationals than managers (Black & Mendenhall, 1990; Tung, 1982); then this would conceptually suggest that managerial and non-managerial personnel will differ in their perceptions of what are the important job performance components of an international assignment. Because their interactions are more interpersonal in nature, one could hypothesize that managerial personnel will consider psycho-social factors to be more important than non-managerial personnel who, in contrast, will consider job knowledge and technical skills to be more important. The present study examined this issue by including both managerial and non-managerial respondents and comparing them in terms of their importance ratings of the identified job performance factors. Specifically, it was hypothesized that:

Hypothesis 3: Because their interactions are more interpersonal in nature, managerial personnel would consider psycho-social factors to be more important than non-managerial personnel who in contrast, were expected to consider job knowledge and technical factors to be more important.

The conceptual reasoning presented for hypothesis 3 can also be extended to generate hypotheses for the effects of organizational type. Like the job type (managerial/non-managerial) distinction, it can be argued that different organizational types may call for different levels of immersion in, and interpersonal interactions with the host or local culture. Consequently, it was hypothesized that:

**Hypothesis 4:** Because they engage in more contact with the local community and host country nationals, international assignees in service organizations will differ from those in manufacturing/production and other less interaction dependent organizations in terms of what they consider to be important performance factors for international assignees.

Past international assignee research has also been critiqued for using very restrictive samples. The argument could be made that because of cultural differences, which translate into differences in the adjustment process, the relative importance of job performance factors may be quite different for individuals from different cultures (Ralston, Gustafson, Elsass, Cheung, & Terpstra, 1992; Ronen & Shenkar, 1985). Hofstede (1993) defines culture as "the collective programming of the mind which distinguishes one group of people from another." (p. 89) and presents five dimensions -- power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation -- on which cultures may be thought to differ.

These cultural differences have been demonstrated to be related to work values and other organizational behaviors and practices (Hofstede, 1980, 1984, 1991, 1993) and have been the basis for criticizing past management research in general and international assignee research in particular for being over-reliant on U.S. nationals as participants or subjects. This over-reliance on American (or western culture) respondents may result in the development of theoretical, conceptual, and applied models that are severely limited in their applicability to non-western cultures (Alder, 1991; Hofstede, 1993; Welsh, Luthans, & Sommer, 1993). For instance, Hofstede (1980), found that approaches to management were substantially different across national cultures. Furthermore, in a study exploring managerial behavior with Chinese managers, Alder, Campbell, and Laurent (1989) demonstrated that "traditional" western conceptions of managerial performance were not transferable to Chinese organizational management.

Subsequently, it would seem that results based on respondents from a specific culture may not be generalizable to other cultures (Welsh et al., 1993). Thus, the current study also investigated the impact of national culture on the generalizability of the study results by using participants sampled from nationally and culturally diverse groups of business and technical personnel. It has been argued (e.g., Black et al., 1991; Church, 1982; Mendenhall & Oddou, 1985) that it is more

difficult to adjust as the cultural distance or difference between the individual's and the host culture gets greater. This, in turn, could be expected to result in more importance being attached to some performance components when compared to situations in which the two countries have more similar cultures.

Consequently, it was hypothesized that:

Hypothesis 5a: The importance of the identified international assignee job performance factors will be influenced by international assignee nationality, assigned country, and the cultural distance between these two.

It also seemed plausible that the above relationship (hypothesis 5a) would be influenced by whether an international assignee was going from a high to low, or low to high difference between their home and assigned country on a specified cultural dimension. For example, an international assignee going from a high power distance culture to a low power distance culture might have a completely different adjustment and acculturation experience when compared to an international assignee going from a low to high power distance culture. These differences could further result in differences in the relative importance of specified components for international assignee job performance. Thus, it was hypothesized that;

Hypothesis 5b: The effect of cultural distance on the importance of identified international assignee job performance factors will be influenced by whether an international assignee was going from a high to low, or low to high difference between their home and assigned country on a specified cultural dimension.

## **II. METHOD**

### **Sample**

Three hundred and thirty-eight subjects from 45 multinational companies (MNC) incorporated in 20 different countries participated in the study. Participants were citizens of 37 countries and were assigned to 45 different countries. International assignees were defined as individuals posted from their home office to a host-country subsidiary or branch. The respondents included both managerial (61%) and non-managerial personnel (39%); the exclusion of other international assignee groups such as Peace Corps volunteers and military personnel make findings from this study more generalizable and meaningful to the multinational business community. The average tenure of participants in international assignments was 4.12 years ( $SD = 5.61$ ). Fifty-five percent ( $N = 186$ ) of the subjects described the nature of work performed by their assigned country organization as being primarily manufacturing and production in nature, 35% ( $N = 117$ ) as service, and 10% ( $N = 35$ ) as communication, transportation, and/or utility. The mean age of the sample was 43.19 years ( $SD = 8.67$ ) and 4.7% ( $N = 16$ ) of the respondents were female.

### **Research Questionnaire**

The research questionnaire (labeled as The International Assignee Questionnaire), which was in English, comprised two sections. The first section consisted of a list of 54 attributes. Fifty-three of these attributes were based on Ronen's (1989) work; these items were used because they are based on one of the most extensive reviews of the international assignee job performance literature to date. After review and revision by a panel of one industrial/organizational (I/O) psychology professor and four senior I/O psychology graduate students prior to its implementation, one additional attribute ("Knowledge of Local Language[s]") was added to the list. Using a five-point Likert scale ranging from "no importance" [0] to "all important" [4] (Bass, Cascio, & O'Connor, 1974), respondents were asked to "Please circle the number that, in your opinion reflects the importance of the following factors to the effectiveness or success of an international assignee." The second section of the research questionnaire solicited information on individual and organizational characteristics such as (a) age; (b) sex; (c) citizenship; (d) current position/job type; (e) tenure

in current international assignment, and international assignments in general; (f) country of current posting; (g) nature of work performed by assigned country organization; and (h) country in which company was incorporated.

#### Procedure and Data Collection

A two-step process was used to secure the study sample. First, MNCs willing to participate were identified and then respondents were solicited within these organizations. Several sources of international corporate information were located and used to generate the MNC sample. Firms which focused predominantly on banking, education, commodity brokering, and insurance were excluded because the nature of their business made it unlikely that they would have sizeable numbers of international assignees posted in different countries representing these companies and their products.

One thousand eight hundred MNCs were randomly selected from Stafford and Purkis' (1989), Directory of Multinationals; Fortune Magazine's (1992) Fortune 500; and Dunn Marketing Services' (1991) Principal International Business 1992: The World Marketing Directory. Next, all MNCs ( $N = 28$ ) listed in the Academy of Management's (1990) Membership Directory, and the Society for Industrial and Organizational Psychology's (1991) Membership Directory that were not chosen from the preceding three sources, were also selected for inclusion in the study. This resulted in an initial MNC sample size of 1828 organizations from 83 countries.

The director of human resources at each MNC was then contacted by mail to solicit his/her participation in the study. Of the 1828 letters mailed, 42 (2%) were returned as undeliverable due to incorrect or outdated mailing addresses (some companies were no longer in business); 1623 (89%) were never heard from; 50 (3%) declined to participate outright due to a lack of interest, and 34 (2%) declined because they did not have any international assignees; 19 (1%) declined to participate after reviewing the research questionnaire; 60 (3%) agreed to participate and out of these, questionnaires were received from 45 companies incorporated in 20 different countries. The modal sizes for the home country organization, and the assigned-country operation/organization were 25,000-35,000, and 500-2,000 employees respectively. Upon agreeing to participate, individual companies were sent camera-

ready copies of the research questionnaire; multiple copies were then made and distributed (by the organization) to individuals who met the research definition of an international assignee and had agreed to participate.

A total of 354 research questionnaires were sent to potential respondents. Two hundred and fifty of these were returned directly to the first author and eighty-eight to the organization which then forwarded them to the first author. The final total study sample was, therefore, 338 respondents from 37 countries (nationality) resulting in a subject response rate of 95%. Thus, although the organizational response rate was extremely low, the subject response rate (95%) was much higher than that for most other international studies (Dawson & Dickinson, 1988; Dillman, 1978; Jobber & Saunders, 1988; Tung, 1981, 1982). The potential limitations and threats of the low organizational response rate are addressed in the Discussion.

### III. RESULTS

The test of hypothesis 1 involved a two-step process - an exploratory and a confirmatory factor analysis. The exploratory factor analysis was used to assign items to factors in each of the four models and the confirmatory analysis was used to comparatively test the fit of each model. To accomplish this, the 338 subjects were randomly divided into two groups of 150 and 188 subjects each; the former was used for the exploratory analysis and the latter for the confirmatory.

For each of the job performance models, a maximum likelihood factor analysis with a promax (non-orthogonal) rotation was used in the exploratory analysis to extract factors from the 54 attributes rated. Attributes were deleted if they loaded less than .30 on the assigned factor or loaded .30 or higher on two or more factors. The solutions for the four-, five-, seven-, eight-, and eleven-factor models each explained 57%, 58%, 65%, 75%, and 79% of the variance respectively.<sup>1</sup>

The next step in the test of hypothesis 1 called for an assessment of which of the five job performance models best fit the international assignee data. This was accomplished by using a confirmatory factor analysis application of the LISREL 7 computer program (Jöreskog & Sörbom, 1989) to test the overall fit of the four models using the second group of 188 international assignees. To determine which best fit the data, a ratio of chi square to its degrees of freedom was computed for each model. Jöreskog and Sörbom (1979) have suggested using this index as a guide to model comparisons during exploratory model fitting. Progressively larger values of this index indicate progressively poorer fit of the model being evaluated (Loehlin, 1987). Using this criteria, the results of the confirmatory factor analyses (presented in Table 2) indicate that, as hypothesized, the eight-factor solution provided the best fit of the international assignee data.

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<sup>1</sup> Because of space limitations, the factors along with loadings of attributes on each factor after the promax rotation for each model are not presented here but are available from the first author.

Table 2

Overall Goodness of Fit Indices for the Four-Factor, Five-Factor, Seven-Factor, Eight-Factor, and Eleven-Factor Models

MODELS	$\chi^2$	df	$\chi^2/\text{df}$ Ratio
Four-Factor Model [Alder, 1983; Hays, 1971]	1820.28	854	2.131
Five-Factor Model [Ronen, 1989]	1538.95	692	2.223
Seven-Factor Model [Tung, 1981]	1476.44	681	2.168
Eight-Factor Model [Campbell, 1990]	1085.33	532	2.040
Eleven-Factor Model [Hough & Dunnette, 1992]	1282.85	576	2.227

The factors for the eight-factor model along with the loadings of attributes on each factor after the promax rotation are presented in Table 3. The labels used for these factors were based on Campbell's job performance factors, a review of past literature (e.g., Alder, 1983; Hays, 1971; Mendenhall & Oddou, 1985; Ronen, 1989; Tung, 1981), descriptions of individual attributes, and discussions with colleagues. These labels were Tolerance, Management/Administration, Family Situation, Effort, Openness, Flexibility, Integrity, and Cross-Cultural Interest. Thus, although eight factors were extracted as hypothesized, the match between the specific factors extracted and those postulated by Campbell's theory was imperfect (this was primarily due to the fact that knowledge and performance factors were not specifically measured in this study). Hence hypothesis 1 was only partially supported.

Table 3

**Attribute Factor Loadings (Standardized Regression Coefficients) for the Eight-Factor Model of International Assignee Job Performance**

Attributes	Factors							
	I	II	III	IV	V	VI	VII	VIII
<b>TOLERANCE</b>								
8. Patience	71	00	-05	01	-01	15	-02	03
27. Display of Respect	57	10	03	06	04	04	00	07
34. Tolerance for Ambiguity	54	05	-09	04	-28	18	07	08
26. Overseas Experience	49	05	05	10	15	-11	-04	13
31. Kindness	48	17	-04	-05	29	-03	05	16
3. Courtesy and Tact <sup>A</sup>	47	-06	07	-02	07	06	32	06
35. Political Sensitivity	41	04	07	02	-12	16	10	20
12. Nonjudgmentalness	38	-19	-04	05	24	26	19	07
15. Emotional Stability	30	13	11	29	-09	09	-07	00
20. Experience in Company <sup>A</sup>	24	01	-01	19	19	-05	08	04
<b>MANAGEMENT/ADMINISTRATION</b>								
23. Organizational Ability	05	91	-11	-15	09	04	-08	-04
22. Managerial Ability	-11	78	-18	04	08	12	-05	-05
24. Administrative Skills	29	65	07	00	08	-05	-01	-19
44. Responsibility	-15	45	19	09	-02	-07	18	09
45. Alertness	12	38	12	19	15	-07	06	08
28. Listening Skills <sup>A</sup>	21	27	20	-21	08	18	09	26
41. Imagination <sup>A</sup>	02	27	-02	24	15	01	22	16
21. Technical Skills and Knowledge <sup>A</sup>	21	25	06	04	09	-04	02	00
<b>FAMILY SITUATION</b>								
52. Adaptability of Spouse and Family	-06	-09	93	01	04	07	-01	-02
53. Willingness of Spouse to Live Abroad	02	-01	92	-07	-04	-02	-05	-01
51. Spouse's Positive Opinion	01	00	91	09	06	-08	-08	-07
54. Stable Marriage	14	07	60	-06	-16	-18	10	15
46. Desire To Go Abroad <sup>A</sup>	06	-20	35	30	03	15	-05	28
<b>EFFORT</b>								
38. Industriousness	08	03	05	75	-08	-18	17	-03
18. Independence	-02	-11	-03	70	08	00	02	03
10. Initiative and Energy <sup>A</sup>	-17	07	06	51	17	15	22	-37
19. Outgoingness and Extraversion	22	16	-07	07	46	26	11	-22
42. Resourcefulness	01	04	-14	41	-14	23	26	11
1. Perseverance	28	17	-11	38	-14	00	11	-20
17. Positive Self-Image	18	25	-04	34	01	07	03	08
29. Confidence <sup>A</sup>	23	20	11	27	00	03	03	05
25. High Motivation <sup>A</sup>	-13	21	20	27	08	20	05	-09
<b>OPENNESS</b>								
11. Openness	-10	05	01	-06	73	29	-01	-04
30. Frankness	-02	24	-09	05	54	-05	24	03
4. Respect <sup>A</sup>	43	-04	09	-16	42	02	16	05
40. Youthfulness	11	17	-04	19	41	-08	-13	23
37. Dependability <sup>A</sup>	23	-07	-11	27	26	-06	27	14

Table 3 (Continued)

Attributes	Factors							
	I	II	III	IV	V	VI	VII	VIII
<b>FLEXIBILITY</b>								
6. Flexibility	.08	.06	-.14	.05	.12	<b>61</b>	-.18	.19
7. Adaptability	.11	.09	-.04	-.02	.08	<b>57</b>	-.06	.07
9. Tolerance <sup>A</sup>	.51	-.15	.03	.15	.17	.52	.01	-.16
33. Ability to Deal With Stress <sup>A</sup>	.26	.34	.14	.16	.17	.32	-.05	-.18
50. Willingness to Change <sup>A</sup>	.00	.18	.17	.05	-.13	.26	.25	.21
16. Race/Ethnic Tolerance <sup>A</sup>	.16	.02	.15	-.19	.06	.25	.06	.20
32. Communication Skills <sup>A</sup>	.18	.06	.03	.10	.13	.17	.16	.16
<b>INTEGRITY</b>								
14. Integrity	.14	-.03	-.06	.11	.09	-.11	<b>72</b>	-.02
13. Sincerity	.29	-.02	-.01	.20	.13	-.21	<b>55</b>	-.14
49. Belief in Mission and Job	-.06	.17	.20	.06	-.07	.04	<b>36</b>	.26
2. Empathy	.29	-.03	-.06	.09	-.01	.05	<b>34</b>	.02
43. Creativity <sup>A</sup>	-.13	.21	.03	.24	.20	.03	.26	.21
<b>CROSS-CULTURAL INTEREST</b>								
47. Interest in Foreign Cultures	.18	-.14	.02	-.12	.15	.08	.06	<b>69</b>
48. Intellectual Curiosity	.13	.03	.06	.08	-.11	.06	.00	<b>59</b>
5. Interest in Nationals	.16	-.10	-.13	-.10	.25	.12	.20	<b>48</b>
39. Variety of Outside Interests <sup>A</sup>	.11	.11	-.03	.29	.31	-.04	-.19	.37
36. Knowledge of Local Language(s) <sup>A</sup>	-.02	-.01	.03	.21	.14	.13	.06	.25
Percent Variance Explained By Each Factor Ignoring Other Factors <sup>B</sup>	24.74	21.06	13.79	22.35	9.93	10.08	13.42	19.39

Note: Factor loadings have been rounded up to two decimals. Decimal points have been omitted. Loadings for factors to which attributes were assigned are in **bold** text. <sup>A</sup>Attribute omitted/deleted from factor because loading less than .30 on assigned factor or loaded .30 or higher on two or more factors. Factor I = Tolerance; Factor II = Management/Administration; Factor III = Family Situation; Factor IV = Effort; Factor V = Openness; Factor VI = Flexibility; Factor VII = Integrity; and Factor VIII = Cross-Cultural Interest. <sup>B</sup>Sum of total variance is greater than 100% because of common variance among factors (i.e., factors are non-orthogonal).

Factor score correlations are presented in Table 4. These results indicate that all the factors were moderately inter-correlated; the lowest correlations were obtained between Family Situation and the other seven factors. Coefficient alpha internal consistency estimates are also presented in Table 4.

Table 4

Factor Correlations, Internal Consistency Estimates, and Descriptive Statistics For Job Performance Factors

Factors	I	II	III	IV	V	VI	VII	VIII
1. Tolerance			(.81)					
2. Management/ Administration	.45*		(.78)					
3. Family Situation	.23*	.23*	(.86)					
4. Effort	.60*	.52*	.21*	(.74)				
5. Openness	.42*	.45*	.05	.39*	(.55)			
6. Flexibility	.42*	.24*	.10	.33*	.26*	(.66)		
7. Integrity	.56*	.52*	.19*	.55*	.41*	.23*	(.69)	
8. Cross-Cultural Interest	.53*	.24*	.17*	.37*	.38*	.38*	.39*	(.69)
Mean	2.46 <sup>A</sup>	2.77 <sup>B</sup>	3.31 <sup>C</sup>	2.68	1.98	3.36 <sup>C</sup>	2.74 <sup>B</sup>	2.40 <sup>A</sup>
SD	.64	.61	.68	.57	.69	.60	.65	.72
Min	.63	.88	0.00	1.00	.34	1.00	0.00	0.00
Max	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Range	3.37	3.12	4.00	3.00	3.66	3.00	4.00	4.00

NOTE: \* $p < .001$ . Values in parentheses represent Cronbach alpha internal consistency estimates. Means with similar letter superscripts do not differ significantly at the .05 level. Means are on a 5-point scale (0 = no importance, 1 = some importance, 2 = quite a bit of importance, 3 = an extreme amount of importance, 4 = all important).

The objective of hypothesis 2 was to assess the perceived relative importance of the extracted factors. It was hypothesized that psycho-social factors such as relational, interpersonal, and family situation will be relatively more important than technical and job-

specific knowledge factors. To test this, a factor score, which was the sum of the ratings of all attributes that loaded on that factor divided by the number of attributes, was computed. Factor importance was, therefore, the mean factor score. (These were the same scores used to calculate the factor correlations and coefficient alpha estimates.) Descriptive statistics for each factor are presented in Table 4. Based on mean importance ratings (scores), the most important job performance factors on a 5-point scale (0 = no importance, 1 = some importance, 2 = quite a bit of importance, 3 = an extreme amount of importance, 4 = all important) were Flexibility ( $M = 3.36$ ) and Family Situation ( $M = 3.31$ ). Next in importance were Management/Administration ( $M = 2.77$ ) and Integrity ( $M = 2.74$ ). The least important factor was Openness ( $M = 1.98$ ). Hypothesis 2 was, therefore, partially supported. Although Management/Administration (a job-specific knowledge factor) ranked third, the most important factors were psycho-social in nature.

Hypothesis 3 called for an investigation of whether perceived importance ratings of the extracted factors would be related to job type (managerial vs. non-managerial). Classification as either managerial or non-managerial was based on participants' responses to a question which asked them to indicate which of nine alternatives "BEST describes your current position." The results of a multivariate analysis of variance (MANOVA) test for an overall difference between managerial and non-managerial international assignee respondents on the mean ratings of the extracted factors was significant ( $F[8, 329] = 2.84, p < .01$ ). Results of subsequent analysis of variance (ANOVA) tests (presented in Table 5) indicate that managerial and non-managerial international assignees differed only on Tolerance and Openness, and in both instances, non-managerial international assignees considered these psycho-social factors to be more important.

A MANOVA was also run to test the fourth study hypothesis, that is, an investigation of whether factor importance would be influenced by international assignees' organizational type. Three categories, (a) manufacturing/production, (b) service, and (c) communication/transportation/utility (Dun & Bradstreet, 1992), were used in the organizational-type analyses. These categories were based on participants responses describing the primary nature of work performed by their assigned country organization.

Table 5

Factor Means, Standard Deviations, and ANOVA Results for Managerial/Non-Managerial Position

Factors	Position				
	Managerial [N=207]		Non-Managerial [N=131]	F	
	M	SD	M	SD	
Tolerance	2.39	.60	2.56	.68	5.35*
Management/ Administration	2.75	.60	2.80	.62	.51
Family Situation	3.30	.71	3.34	.63	.28
Effort	2.64	.56	2.73	.57	1.83
Openness	1.89	.68	2.13	.69	9.36**
Flexibility	3.39	.56	3.32	.65	1.10
Integrity	2.74	.65	2.75	.65	.05
Cross-Cultural Interest	2.39	.73	2.42	.72	.18

**NOTE:** \* $p < .05$ , \*\* $p < .01$ . Means are on a 5-point scale (0 = no importance, 1 = some importance, 2 = quite a bit of importance, 3 = an extreme amount of importance, 4 = all important).

The result of the MANOVA test for an overall effect for organizational type on international assignees' mean importance ratings of the extracted factors was significant ( $F[16, 654] = 5.65$ ,  $p < .001$ ). Results of subsequent ANOVAs for the effect of organizational type on the specific factors are reported in Table 6. Consistent with the study hypothesis, international assignees from service organizations generally had higher factor importance ratings than those from other types of organizations; and on four factors (Tolerance, Effort, Openness, and Integrity), these means were significantly higher. Furthermore, international

assignees in communication/transportation/utility, and manufacturing/production organizations tended to be similar in their importance ratings.

**Table 6**  
**Factor Means, Standard Deviations, and ANOVA Results for Organizational Type**

Factors	Organizational Type						F
	Communication, Transportation, and Utility [N=35]		Manufacturing/ Production [N=186]		Service [N=117]		
	M	SD	M	SD	M	SD	
Tolerance	2.44 <sup>A</sup>	.50	2.26 <sup>A</sup>	.58	2.78 <sup>B</sup>	.63	28.01**
Management/ Administration	2.77 <sup>A</sup>	.61	2.69 <sup>AB</sup>	.61	2.89 <sup>AC</sup>	.59	4.11*
Family Situation	3.41	.60	3.34	.63	3.24	.77	1.16
Effort	2.58 <sup>A</sup>	.58	2.55 <sup>A</sup>	.54	2.91 <sup>B</sup>	.53	16.81**
Openness	1.90 <sup>A</sup>	.74	1.87 <sup>A</sup>	.60	2.19 <sup>B</sup>	.77	8.12**
Flexibility	3.36 <sup>A</sup>	.66	3.28 <sup>AB</sup>	.59	3.49 <sup>AC</sup>	.56	4.45*
Integrity	2.56 <sup>A</sup>	.68	2.61 <sup>A</sup>	.64	3.01 <sup>B</sup>	.56	16.88**
Cross-Cultural Interest	2.39 <sup>A</sup>	.79	2.33 <sup>AB</sup>	.73	2.52 <sup>AC</sup>	.69	2.60

NOTE: \*p < .05, \*\*p < .001. Means reported are least square means; these means are adjusted as if the non-balanced design were balanced. Means with different letter superscripts(within rows) differ significantly at the .05 level. Means are on a 5-point scale (0 = no importance, 1 = some importance, 2 = quite a bit of importance, 3 = an extreme amount of importance, 4 = all important).

To test hypotheses 5a and 5b, nationality and assigned country clusters were generated using Hofstede's (1980) national culture clusters. Clusters that had less than ten international assignees were omitted from the analyses because these sample sizes were considered to be too small to permit a meaningful interpretation of the results. This decision resulted in the retention of six nationality and eight assigned country clusters. The retained nationality clusters

were Anglo ( $N = 186$ ); Arab ( $N = 14$ ); Far Eastern ( $N = 12$ ); Germanic ( $N = 31$ ); Latin European ( $N = 13$ ); and Nordic ( $N = 69$ ). The assigned country clusters were Anglo ( $N = 89$ ); Arab ( $N = 77$ ); Far Eastern ( $N = 28$ ); Germanic ( $N = 28$ ); Independent ( $N = 14$ ); Latin American ( $N = 39$ ); Latin European ( $N = 34$ ); and Nordic ( $N = 15$ ). A listing of countries representing each cluster is presented in the Appendix.

The results of the MANOVA test for an overall effect for nationality and assigned country on international assignees' mean importance ratings of the extracted factors were significant ( $F[40, 1552] = 5.23, p < .001$ ; and  $F[56, 2130] = 4.05, p < .001$  for nationality and assigned country respectively). Results of subsequent ANOVAs for the effect of both variables on the job performance factors are reported in Table 7. These results demonstrate that, as hypothesized, international assignees' nationality and country to which they were assigned influenced their perceptions of how important they considered the job performance factors to be.

**Table 7**  
Factor Means and ANOVA Results for Nationality and Assigned Country Cultural Clusters

Nationality Cultural Clusters

Factors	Anglo	Arab	Eastern	Germanic	Independent	Latin American	Latin European	Nordic	F
Tolerance	2.58	2.80	3.13	2.22	--	--	1.83	2.14	14.00***
Management/ Administration	2.75	3.20	3.08	2.88	--	--	2.54	2.60	3.78**
Family Situation	3.38	3.20	3.17	3.33	--	--	3.00	3.25	1.22
Effort	2.78	3.07	3.15	2.39	--	--	2.31	2.43	11.20***
Openness	1.84	2.86	2.33	2.02	--	--	1.92	2.05	7.35***
Flexibility	3.42	3.54	3.50	3.24	--	--	3.50	3.18	2.46*
Integrity	2.84	3.16	3.27	2.61	--	--	2.15	2.43	10.48***
Cross-Cultural Interest	2.40	2.81	2.92	2.20	--	--	2.44	2.30	2.88*

Assigned Country Cultural Clusters

Factors	Anglo	Arab	Eastern	Germanic	Independent	Latin American	Latin European	Nordic	F
Tolerance	2.25	3.03	2.34	2.15	2.64	2.25	2.15	2.13	18.10***
Management/ Administration	2.61	3.03	2.72	2.53	2.60	2.89	2.68	2.43	4.83***
Family Situation	3.37	3.34	3.37	3.24	3.16	3.26	3.22	3.31	.40
Effort	2.56	3.04	2.60	2.57	2.56	2.38	2.67	2.50	7.96***
Openness	1.85	2.35	1.65	1.83	1.55	1.99	1.97	1.97	6.14***
Flexibility	3.28	3.59	3.27	3.59	3.18	3.19	3.30	3.08	3.87***
Integrity	2.73	3.10	2.54	2.63	2.61	2.56	2.60	2.21	6.42***
Cross-Cultural Interest	2.39	2.68	2.18	2.32	2.36	2.17	2.24	2.50	3.07***

NOTE: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Means reported are least square means; these means are adjusted as if the non-balanced design were balanced. Means are on a 5-point scale (0 = no importance, 1 = some importance, 2 = quite a bit of importance, 3 = an extreme amount of importance, 4 = all important). A list of significant pairwise comparisons of clusters is available from the first author.

Hofstede (1991, 1993) provides index value scores and ranks for each of his five cultural dimensions. Cultural distance was calculated as the absolute difference between an international assignee's nationality and assigned country index value scores on a specified cultural dimension. Hence, each international assignee had five cultural distance scores -- one for each dimension. International assignees were next divided into two groups consisting of those whose home country score was higher than their assigned country's score and vice versa. International assignees whose home country and assigned country index score were equal (the same) were excluded from these analyses. The correlation between factor importance ratings and cultural distance for each dimension were then computed within each group to examine whether the similarity (or lack thereof) between nationality and assigned country cultures would be related to the importance of the extracted factors.

The results of these analyses, presented in Table 8, indicate that there were some significant relationships. For instance, for international assignees going from a low to high power distance culture, those with more dissimilarity in cultures considered the Tolerance, Management/Administration, and Effort job performance factors to be more important than those with less dissimilarity. High to low individualism international assignees with more dissimilarity considered Tolerance, and Management/Administration to be more important than those with less dissimilarity. Additional significant relationships were obtained for some factors on masculinity and uncertainty avoidance.

Table 8  
Correlations Between Cultural Distance and Job Performance Factor Ratings

CULTURAL DISTANCE	Factors							
	I	II	III	IV	V	VI	VII	VIII
Power Distance								
<sup>A</sup> (High $\Rightarrow$ Low)	-.03	.19	-.18	-.17	.15	.06	-.10	.18 <b>[77]</b>
<sup>B</sup> (Low $\Rightarrow$ High)	.28***	.15*	.05	.18**	-.01	.03	.11	.02 <b>[218]</b>
Individualism								
(High $\Rightarrow$ Low)	.26***	.16*	.04	.04	.09	-.02	.04	.04 <b>[224]</b>
(Low $\Rightarrow$ High)	-.02	-.02	.01	-.19	.12	-.03	-.16	.05 <b>[74]</b>
Masculinity								
(High $\Rightarrow$ Low)	-.09	.06	-.03	.04	-.02	-.02	-.18*	.05 <b>[155]</b>
(Low $\Rightarrow$ High)	-.17*	.08	-.04	-.09	.30***	-.04	-.17*	-.03 <b>[142]</b>
Uncertainty Avoidance								
(High $\Rightarrow$ Low)	-.14	-.06	.05	-.10	.04	.06	-.31**	.04 <b>[93]</b>
(Low $\Rightarrow$ High)	.01	-.01	-.07	.01	.00	.02	-.10	-.04 <b>[206]</b>
Long-Term Orientation								
(High $\Rightarrow$ Low)	.13	.08	.12	-.05	.23	.05	-.07	.04 <b>[56]</b>
(Low $\Rightarrow$ High)	.25	-.01	-.05	-.13	-.11	-.05	-.04	-.04 <b>[60]</b>

NOTE: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . All tests are two-tailed because there were no directional hypotheses.

<sup>A</sup>Nationality cultural dimension index score is greater than assigned country score. <sup>B</sup>Nationality cultural dimension index score is less than assigned country score. Sample sizes for each row of correlations are bolded and in brackets.

Factor I = Tolerance; Factor II = Management/Administration; Factor III = Family Situation; Factor IV = Effort; Factor V = Openness; Factor VI = Flexibility; Factor VII = Integrity; and Factor VIII = Cross-Cultural Interest.

#### IV. DISCUSSION

The present study sought to contribute to the extant literature and management theory by using Campbell's (1990) theory of performance in an attempt to identify the factors underlying international assignee job performance in relatively long-term international assignments. Campbell's (1990) eight-factor model was also tested against three alternative models of international assignee job performance. The effects of job-type, organizational-type, and culture on the importance ratings assigned to the job performance factors was also assessed. The results of the confirmatory factor analysis indicated that an eight-factor model provided the best fit to the international assignee data. However, although eight factors best represented the international assignee data, as hypothesized by Campbell's theory, with the exception of the Management/Administration, and Effort factors, the content and labels of the extracted factors were dissimilar from those postulated by the theory. On the other hand, although there were some differences, it would seem that the Family Situation factor obtained here, can be viewed as being representative of "nonjob-specific tasks" factors as characterized by Campbell (1990).

Thus the results of the present study suggest that not all jobs incorporate all of Campbell's eight factors. Furthermore, they indicate that some jobs might have factor patterns that are not captured by his performance model in its current form. For instance, Campbell (1990) describes nonjob-specific task factors as the organizational requirement "to perform tasks or execute performance behaviors that are not specific to their particular jobs" (p. 709). It would seem that for international assignees, the form of the nonjob-specific factor -- family situation -- is very different, encompassing the spouse and family's ability to adjust to international assignments.

The current study also sought to assess the relative importance of the extracted job performance factors. Flexibility, and Family Situation were found to be the most important factors. The importance of the Family Situation factor is consistent with other research on international assignments and transfers (e.g., Alder, 1983; Mendenhall & Oddou, 1985;

Miller, 1972; Stroh et al., 1992; Tung, 1979). Spouse and family inability to adjust has been suggested to be perhaps the most important nonwork reason for foreign assignment failures and early returns (Black, 1988; Black & Stephens, 1989) because the uncertainty that could result from poor cross-cultural adjustment of a spouse (and family) inhibits the international assignee's own adjustment (Black et al., 1991) and subsequent success. The importance and robustness of the Family Situation factor is further highlighted by the current study's finding that its importance was not influenced by any of the other variables examined (i.e., managerial/non-managerial status, organizational type, nationality, assigned country, and cultural distance). Consequently, based on these and other results, the call to include spouses and other family members in cross-cultural training (Alder, 1990; Rippert-Davila, 1985) seems warranted.

In general, the results of the present study would suggest that the practice of over-emphasizing job knowledge and technical competence in international assignee selection decisions (Inman, 1985; Mendenhall & Oddou, 1985; Stone, 1991; Tung, 1981), coupled with the under-emphasis of psycho-social factors may be partially responsible for the high failure rates observed for this group of employees. It would seem that the important job performance factors are not those being used to make selection (and training) decisions. For example, from an informational point of view, the importance of the Family Situation factor argues strongly for sending the international assignee's family overseas to preview the situation, when feasible.

The current study also assessed the generalizability of the factor importance ratings by investigating whether they would be influenced by such variables as job type (i.e., managerial vs. non-managerial); organizational type; international assignee nationality, assigned country, and the cultural distance between the international assignee's home and assigned country. The results were generally affirmative. For instance, international assignees in service organizations, who arguably engage in more contact with the local community and host country nationals, rated most factors as being significantly more important than international assignees in other organizational types. Furthermore, the cultural distance/importance ratings

relationships obtained here would tentatively suggest that the adjustment, acculturation, and success of an international assignee is at least partially influenced by whether they experience a high-to-low or low-to-high cultural difference between their home and assigned country. Thus the results obtained for nationality and assigned country, and cultural distance support Stening and Hammer's (1992) observation that the cultural background of the international assignee and the country-specific environment to which they are assigned play different roles in influencing cross-cultural adaptation. In sum, the results lend some support to a contingency approach (e.g., Tung, 1981) suggesting that the effective selection and training of international assignees might be more complex than has been previously thought.

#### Recommendations and Suggestions For Future Research

To conclude, several recommendations and suggestions for the selection and training of international assignees seem warranted based on the results reported here. First, the very nature of some of the job performance factors identified here does not permit their inclusion in selection systems. One of the most important factors extracted was a nonjob-specific factor -- Family Situation. One could subsequently argue that the best use of this information is to place only unmarried personnel in international assignments (84% of the present sample was married). Such a practice will, of course, be discriminatory and politically untenable. This information can, however, be used in training. Specifically, we reiterate that which has been stated by other researchers (e.g., Alder, 1990; Black & Stephens, 1989; Rippert-Davila, 1985) -- that spouses and other family members be included in cross-cultural training because they are pivotal not only to the success of the international assignee, but also even to the international assignee's willingness to relocate internationally (Stroh et al., 1992).

Second, job knowledge and technical competence should not be the sole or primary factor in the selection of international assignees. In fact, one could speculate that in terms of this factor, international assignees are a fairly homogenous group. That is, they are all very skilled and knowledgeable in what they do. If this is the case, then this factor will explain very little of the variance in international assignee performance, and other factors, such as

Flexibility, Tolerance, and Effort, will begin to play a more central role in differentiating successful and unsuccessful international assignees, as appears to be the case. Consequently, these other factors need to be incorporated into international assignee selection and training systems. Future research would then involve attempts to assess the validity and utility of these factors.

Third, further empirical support for the eight-factor model obtained here is needed. As previously noted, although eight factors best fit the international assignee data, there was not a perfect match between the general job performance factors postulated by Campbell's theory and those obtained here. One reason for this finding could be the attributes on which the factors were based. These attributes were from Ronen's (1989) review of the international assignee job performance literature. Thus it was a fairly comprehensive list for the target job in question. On the other hand, although Ronen's five-factor model was not supported here, it seems reasonable to investigate whether Campbell's eight factors would be obtained if the attributes were generated with these specific factors in mind. These future research efforts might also consider using much larger samples than were used here.

The theoretical and applied usefulness of field studies is well documented (e.g., Cook, Campbell, & Peracchio, 1990), but field conditions are often difficult to control. Consequently, although the subject response rate was much higher than that for most other international studies (Dawson & Dickinson, 1988; Dillman, 1978; Jobber & Saunders, 1988; Tung, 1981, 1982), the organizational response rate was extremely low. Whereas it can be viewed as part of the challenge of doing international management field research, this constitutes a potential limitation of the present field study. Because a large number of organizations were canvassed and, obviously, only those that agreed to participate were used (i.e., self selected themselves into the study), it is plausible that the study sample might not be representative of MNCs in general, but rather only those that care about expatriate issues.

To assess the likelihood of this scenario (i.e., concerns about both the low positive responses from the corporations [3%] and the representativeness of the participating firms),

additional, supplementary, data were compiled. First, a random sample of 57% (1020) of the non-participating organizations was generated. For these organizations, the modal home country organization size was determined. The modal home country organization size was found to be the same as that for the participating organizations (i.e., 25,000-35,000 employees).

Second, because the modal assigned-country operation/organization size is in reference to the participating international assignee, comparative information cannot be presented for non-participating organizations. However, the mean percentage of employees in foreign operations, as reported in Dun and Bradstreet (1993), Fortune Magazine (1992, July; 1993, July; 1993, August), and Stafford and Purkis (1989), for both participating and non-participating organizations, were relatively similar (14% and 17% respectively).

Third, as with the modal assigned-country operation/organization size, the nature of work performed by *their* assigned country organization was self-reported by respondents, thus comparative data cannot be presented for non-participating organizations. Again, however, the distribution of foreign operation-type as reported in the materials referenced above were fairly similar for participating and non-participating organizations (manufacturing and production = 79% and 73%; service = 8% and 11%; communication, transportation, and/or utility = 13% and 16%; respectively). In sum, this supplementary data adequately demonstrates that in spite of the low response rate, the participating organizations were really not that much different from the non-participating organizations - at least in terms of size and organization type.

Another potential limitation associated with the sample of organizations used here is that although several of them were canvassed, there were no Japanese companies or participants in the study. Again, this is a potential limitation because the Japanese represent a substantial portion of expatriates in the world today (Black, 1990; White, 1988; Sullivan, 1992). Hence, it is important that the appropriateness of the eight-factor job performance model be verified and other results replicated with other samples to establish the extent of

generalizability. Until then, it seems prudent to recommend that the results of the present study be cautiously interpreted.

Fifth, future research might also attempt to determine whether job performance factor structures would be different for managers and non-managers. Our relatively small sample on this classification limited our analyses to tests of mean differences which indicated that importance ratings of some performance factors were influenced by managerial/non-managerial status. Along similar lines, future research might extend the present study to investigate job performance factors that international assignees' home office managers and host country personnel consider to be important for international assignees. Such research could use the procedures and protocols employed here to determine the similarity (or dissimilarity) between the job performance structures of those in the host country and/or international assignees and their home office managers.

Sixth, because the results reported here were partially supportive of the contingency approach discussed by Tung (1981), it is suggested that researchers and practitioners be sensitive to this issue. Although our level of analysis does not permit specific detailed recommendations, it needs to be recognized that the effective selection and training of international assignees might be more complex than has been previously thought. One needs to consider not only the international assignee's personality characteristics and other features (e.g., family situation), but also their task (amount of interaction with the local community), nationality, and country of assignment.

In summary, using Campbell's (1990) model of performance, the present study sought to identify the factors underlying international assignee job performance and their relative importance. Four alternative models of international assignee job performance were also assessed. Unique features of this study included the use of respondents from several countries and organizations, assigned to diverse countries, and performing diverse jobs in an attempt to address critiques of past international assignee research, and also to enhance the generalizability of the obtained results. Eight job performance factors were identified. These

were Flexibility, Family Situation, Management/Administration, Integrity, Effort, Tolerance, Cross-Cultural Interest, and Openness. Factor importance ratings were influenced by position (managerial/non-managerial status), organizational type, international assignees' nationality, the country to which they were assigned, and cultural distance (similarity between nationality and assigned country).

Although military personnel were excluded from this study since they typically are assigned to places where their culture is present in some form (e.g., they are assigned to an U.S. military base), the factors identified as being important for international assignees, in general, should also be considered as part of the assignment process and in job design and redesign for military personnel in foreign postings. The importance of these factors should also be considered when developing the cultural training and education programs for military personnel prior to their assignment within non-US host countries. The likelihood that these factors may serve as predictors of the success of a military member in a foreign assignment in a manner similar to that of non-military personnel must be considered and addressed. Understanding the potential impact of these factors on job performance, the quality of military work life, job satisfaction, and the ultimate success of a military member in a foreign assignment, is critical to ensuring an appropriate match between individuals and the jobs and tasks they must perform as part of their military duty.

## REFERENCES

- Academy of Management. (1990). Membership directory. Ada, OH: Author.
- Alder, N. J. (1983). Cross-cultural management: Issues to be faced. International Studies of Management and Organizations, 13, 7-45.
- Alder, N. J. (1990). A portable life. In D. Wilson, & R. Rosenfeld (Eds.), Managing organizations: Text, readings, and cases (pp. 406-415). Maidenhead, England: McGraw Hill.
- Alder, N. J. (1991). International dimensions of organizational behavior (2nd ed.). Boston, MA: Kent Publishing.
- Alder, N. J., Campbell, N., & Laurent, A. (1989). In search of appropriate methodology: From outside the People's Republic of China, looking in. Journal of International Business Studies, 20, 61-74.
- Baker, J. C., & Ivancevich, J. M. (1971). The assignment of American executives abroad: Systematic, haphazard, or chaotic? California Management Review, 13, 39-44.
- Bass, B. M., Cascio, W. F., & O'Connor, E. J. (1974). Magnitude estimates of expressions of frequency and amount. Journal of Applied Psychology, 59, 313-320.
- Black, J. S. (1988). Work role transitions: A study of American expatriate managers in Japan. Journal of International Business Studies, 19, 277-294.
- Black, J. S. (1990). Factors related to the adjustment of Japanese expatriate managers in America. Research in Personnel and Human Resource Management, 5, 109-125.
- Black, J. S., & Gregersen, H. B. (1991). Antecedents to cross-cultural adjustment for expatriates in Pacific Rim Assignments. Human Relations, 44, 497-515.
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. Academy of Management Review, 15, 113-136.
- Black, J. S., Mendenhall, M., & Oddou, G. R. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. Academy of Management Review, 16, 291-317.

Black, J. S., & Stephens, G. K. (1989). The influence of the spouse and intent to stay in Pacific Rim overseas assignments. Journal of Management, 15, 529-544.

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette, & L. M. Hough, (Eds.), Handbook of Industrial & Organizational Psychology (2nd, Ed.), Vol. 1., (pp. 687-732). Palo Alto, CA: Consulting Psychologists Press.

Church, A. T. (1982). Sojourner adjustment. Psychological Bulletin, 9, 540-572.

Cook, T. D., Campbell, D. T., & Peracchio, L. (1990). Quasi experimentation. In M. D. Dunnette, & L. M. Hough, (Eds.), Handbook of Industrial & Organizational Psychology (2nd, Ed.), Vol. 1., (pp. 491-576). Palo Alto, CA: Consulting Psychologists Press.

Copeland, L., & Griggs, L. (1985). Going international. NY: Random House.

Dawson, S., & Dickinson, D. (1988). Conducting international mail surveys: The effect of incentives on response rates within an industrial population. Journal of International Business Studies, 19, 491-496.

Deshpande, S. P., & Viswesvaran, C. (1992). Is cross-cultural training of expatriate managers effective: A meta-analysis. International Journal of Intercultural Relations, 16, 295-310.

Dillman, D. (1978). Mail and telephone surveys: The total design method. New York: Wiley.

Dun & Bradstreet (1992). Million dollar directory: America's leading public and private companies. Parsippany, NJ: Dun & Bradstreet, Inc.

Dun & Bradstreet (1993). D&B europa 1994. London: Dun & Bradstreet, Ltd.

Dunbar, E., & Ehrlich, M. (1986). International practices, selection, training, and managing the international staff: A survey report. NY: Columbia University, Teachers College, Project on International Human Resource.

Dunn Marketing Services. (1991). Principal international business: The world marketing directory. NY: Dunn Marketing Services, Inc.

The Fortune 500. (1992, April). Fortune Magazine, pp. 200-321.

- The Global 500. (1992, July). Fortune Magazine, pp 179-190.
- The Global 500. (1993, July). Fortune Magazine, pp 191-224.
- The Global Service 500. (1993, August). Fortune Magazine, pp 159-196.
- Gomez-Mejia, L. R., & Welbourne, T. (1991). Compensation strategies in a global context. Human Resource Planning, 14, 29-41.
- Gregersen, H. B., & Black, J. S. (1990). A multifaceted approach to expatriate retention in international assignments. Group and Organizational Studies, 15, 461-485.
- Hays, R. D. (1971). Ascribed behavioral determinants of success-failure among U.S. expatriate managers. Journal of International Business Studies, 2, 40-46.
- Heller, J. E. (1980). Criteria for selecting an international manager. Personnel, May-June, 47-55.
- Hofstede, G. (1980). Culture's consequences: International differences in work related values. Beverly Hills, CA: Sage.
- Hofstede, G. (1984). The cultural relativity of the quality of life concept. Academy of Management Review, 9, 389-398.
- Hofstede, G. (1991). Cultures and organizations: Software of the mind. London: McGraw-Hill.
- Hofstede, G. (1993). Cultural constraints in management theories. Academy of Management Executive, 7, 81-94.
- Hough, L., & Dunnette, M. D. (1992, August). U.S. managers abroad: What it takes to succeed. In R. Guzzo (Chair), Expatriate assignments: Identifying candidates, managing retention, and strategic roles. Symposium conducted at the 52nd annual meeting of the Academy of Management, Las Vegas.
- Inman, M. (1985). Language and cross-cultural training in American multinational corporations. The Modern Language Journal, 69, 247-255.
- Jobber, D., & Saunders, J. (1988). An experimental investigation into cross-national mail survey response rates. Journal of International Business Studies, 19, 483-489.

Jöreskog, K. G., & Sörbom, D. (1979). Advances in factor analysis and structural equation models. Cambridge, MA: Abt Books.

Jöreskog, K. G., & Sörbom, D. (1989). LISREL VII: User's reference guide. Mooresville, IN: Scientific Software.

Loehlin, J. C. (1987). Latent variable models: An introduction to factor, path, and structural analysis. Hillsdale, N.J.: Lawrence Erlbaum.

Mendenhall, M., Dunbar, E., & Oddou, G. (1987). Expatriate selection, training, and career-pathing: A review and critique. Human Resource Management, 26, 331-345.

Mendenhall, M., & Oddou, G. (1985). The dimensions of expatriate acculturation: A review. Academy of Management Review, 10, 39-47.

Miller, E. L. (1972). The overseas assignment: How managers determine who is to be selected. Michigan Business Review, 24, 12-19.

Oddou, G. R. (1991). Managing your expatriates: What successful firms do. Human Resource Planning, 14, 301-308.

Ralston, D. A., Gustafson, D. J., Elsass, P. M., Cheung, F., & Terpstra, R. H. (1992). Eastern values: A comparison of managers in the United States, Hong Kong, and the People's Republic of China. Journal of Applied Psychology, 77, 664-671.

Rippert-Davila, S. (1985). Cross-cultural training for business: A consultant's primer. The Modern Language Journal, 69, 238-246.

Ronen, S. (1989). Training the international assignee. In I. L. Goldstein (Ed.), Training and Development in Organizations (pp. 417-453). San Francisco, CA: Jossey-Bass.

Ronen, S., & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. Academy of Management Review, 10, 435-454.

Society for Industrial and Organizational Psychology. (1991). Membership directory. Arlington Heights, IL: Author.

Stafford, D. C., & Purkis, R. H. A. (1989). Directory of multinationals, (3rd. ed.). NY: Stockton Press.

Stening, B. W., & Hammer, M. R. (1992). Cultural baggage and the adaption of expatriate American and Japanese managers. Management International Review, 32, 77-89.

Stone, R. J. (1991). Expatriate selection and failure. Human Resource Planning, 14, 9-18.

Stroh, L. K., Brett, J. M., & Reilly, A. H. (1992, August). What may be obvious may not be true: A non-recursive model predicting manager and spouse international willingness to relocate. Paper presented at 52nd annual meeting of the Academic of Management, Las Vegas.

Sullivan, J. (1992). Invasion of the salarymen: The Japanese business presence in America. Westport, CT: Praeger.

Tung, R. (1979). U.S. multinationals: A study of their selection and training for overseas assignments. Academy of Management Proceedings, 39, 298-301.

Tung, R. (1981). Selecting and training personnel for overseas assignments. Columbia Journal of World Business, 19, 68-78.

Tung, R. (1982). Selection and training procedures of U.S., European, and Japanese multinationals. California Management Review, 25, 57-71.

Tung, R. L. (1987). Expatriate assignments: Enhancing success and minimizing failure. Academy of Management Executive, 1, 117-126.

Tung, R. L. (1988). The new expatriates: Managing human resources abroad. New York: Ballinger.

Wederspahn, G. M. (1992). Costing failures in expatriate human resources management. Human Resource Planning, 15, 27-35.

Welsh, D. H. B., Luthans, F., & Sommer, S. M. (1993). Managing Russian factory workers: The impact of U.S.-based behavioral and participative techniques. Academy of Management Journal, 36, 58-79.

White, M. (1988). The Japanese overseas. New York: Free Press.

## **Appendix**

**Nationality and Assigned Country Clusters Represented in Analyses**

## Nationality and Assigned Country Clusters Represented in Analyses

		Nationality Clusters					
		Far Eastern	Germanic	Independent	Latin American	Latin European	Nordic
Anglo	Arab	Hong Kong Philippines Malaysia Singapore	Austria Germany Switzerland	-- -- --	-- -- --	Belgium France Italy	Denmark Finland Netherlands Norway Sweden
Assigned Country Clusters							
Australia	United Arab Emirates	China	Austria	Chile	Belgium		
Canada	Saudi Arabia	Hong Kong	Germany	Colombia	Brazil		
Ireland		Indonesia	Switzerland	Costa Rica	France		
New Zealand		Malaysia		Ecuador	Italy		
United Kingdom		Singapore		Mexico	Spain		
United States		Taiwan		Puerto Rico	Venezuela		